

1966 OPERATING SUMMARY

PARIS

water pollution control plant

ONTARIO WATER RESOURCES COMMISSION

Division of Plant Operations

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ONTARIO WATER RESOURCES COMMISSION
OFFICE OF THE GENERAL MANAGER

Members of the Paris Local Advisory Committee,
Town of Paris.

Gentlemen:

We are pleased to submit to you the 1966 Operating Summary for the
Paris Water Pollution Control Plant, OWRC Project No. 59-S-34.

It is hoped that our joint participation in efforts to combat water pollution
will have even more success in the coming year.

Yours very truly,

A handwritten signature in dark ink, appearing to read "D. S. Caverly", is written over the typed name.

D. S. Caverly,
General Manager.

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NOV 23 1967

ONTARIO WATER
RESOURCES COMMISSION



ONTARIO WATER RESOURCES COMMISSION

801 BAY STREET

TORONTO 5

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J. H. H. ROOT, M.P.P.
VICE-CHAIRMAN

D. S. CAVERLY
GENERAL MANAGER

W. S. MACDONNELL
COMMISSION SECRETARY

General Manager,
Ontario Water Resources Commission.

Dear Sir:

I am happy to present you with the 1966 Operating Summary for the Paris Water Pollution Control Plant, OWRC Project No. 59-S-34.

The report offers a concise summary of operating data for the year and comparisons with previous years where these are applicable and significant.

Yours very truly,

A handwritten signature in cursive script, appearing to read "B. C. Palmer".

B. C. Palmer, P. Eng.,
Director,
Division of Plant Operations.

FOREWORD

● This operating summary contains complete information on the management of the project during 1966. It contains a concise review of the year's plant operation, significant financial details, and a visual presentation in graphs and charts of technical performance.

The information will be of value to interested parties in assessing the adequacy of the project at this time and its ability to meet future requirements.

The report is the result of co-operation by several groups within the Division of Plant Operations. These include the statistics section and the technical publications section. The Division of Finance and the draughting section of the Division of Sanitary Engineering were also closely associated with its publication.

The Regional Operations Engineer, however, has had the primary responsibility for the content, and will be happy to answer any questions regarding it.

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PARIS
water pollution control plant

operated for

THE TOWN OF PARIS

by the

ONTARIO WATER RESOURCES COMMISSION

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Assistant Director: C. W. Perry
Regional Supervisor: A. C. Beattie
Operations Engineer: R. S. McKittrick

801 Bay Street Toronto 5

'66 REVIEW

The total operating cost for 1966 was \$10,267.83, representing a cost per million gallons treated of \$60.41. The cost to the average family was \$6.55.

The average flow for the year was 0.466 MGD, which represents 92% of the design capacity. The average raw sewage strength was 140 and 147 ppm for BOD and SS respectively, as compared to a design sewage strength of 200 and 170 ppm for BOD and SS. It is possible that rain water gaining access to the sanitary sewers is responsible for this dilution.

Mechanical and electrical inspections of the equipment were carried out by the head office Maintenance Section.

PROJECT COSTS

NET CAPITAL COST (Estimated)		\$726,025.80
DEDUCT - Portion Financed by CMHC (Estimated)	\$365,238.90	
- Payment from Municipality	<u>34,000.00</u>	<u>399,238.90</u>
Long Term Debt to OWRC		<u>\$326,786.90</u>
Debt Retirement Balance at Credit (Sinking Fund) December 31, 1966		\$ <u>28,149.81</u>
Net Operating		\$ 10,267.83
Debt Retirement		6,594.00
Reserve		4,585.52
Interest Charged		18,384.01
		<u> </u>
TOTAL		\$ <u>39,831.36</u>

RESERVE ACCOUNT

Balance at January 1, 1966	\$ 12,478.69
Deposited by Municipality	4,585.52
Interest Earned	<u>789.74</u>
	\$ 17,853.95
Less Expenditures	<u> </u>
Balance at December 31, 1966	\$ <u>17,853.95</u>

MONTHLY OPERATING COSTS

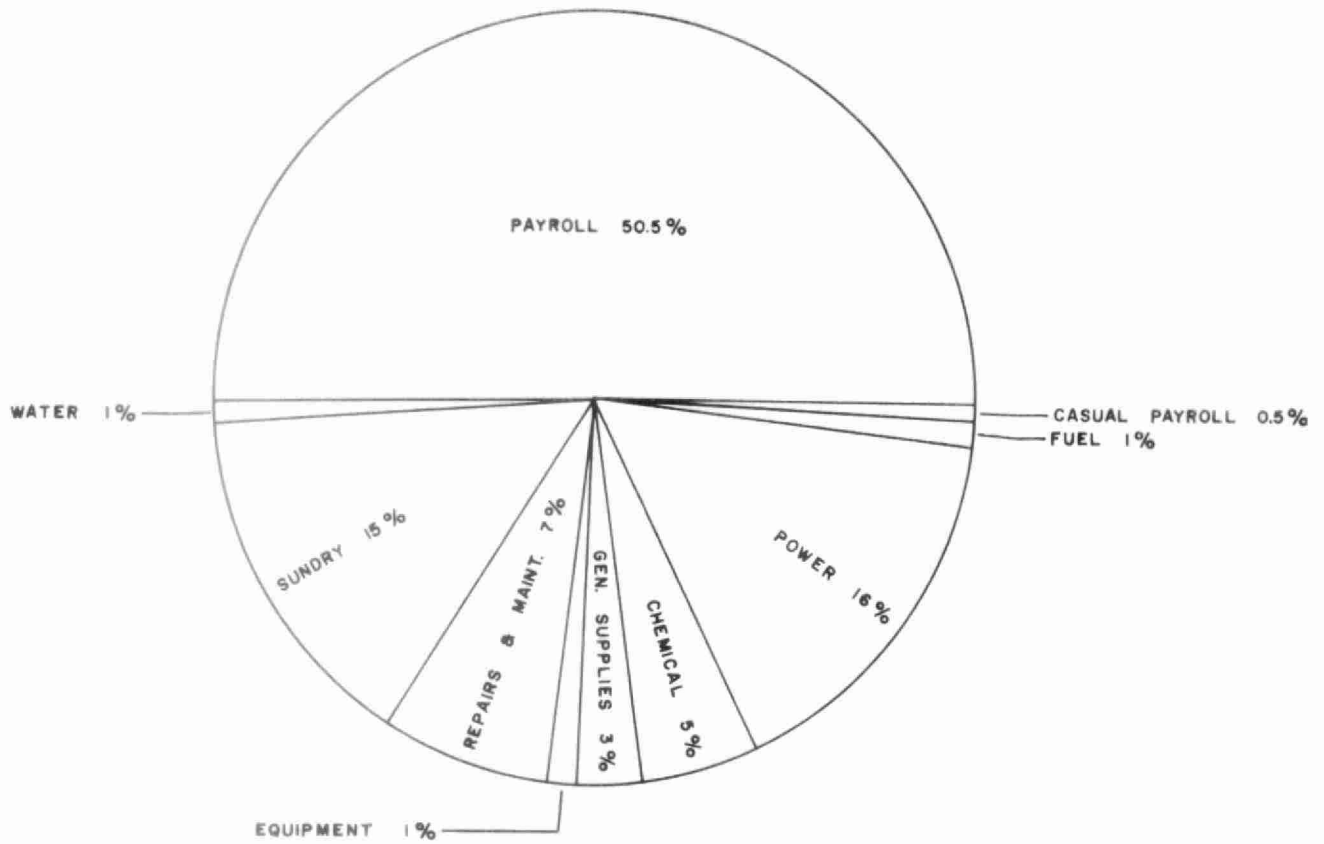
MONTH	TOTAL EXPENDITURE	PAYROLL	CASUAL PAYROLL	FUEL	POWER	CHEMICAL	GENERAL SUPPLIES	EQUIPMENT	REPAIRS & MAINTENANCE	SUNDRY	WATER
JAN	447.76	426.21					4.57			16.98	
FEB	1052.05	402.36			134.02		4.75	18.98	150.12	341.82	
MARCH	639.87	371.52		55.48	137.01		33.94			41.92	
APRIL	879.81	564.38	50.75		144.45	34.16	10.47		28.58	47.02	
MAY	1014.69	397.25			137.31	228.38	52.80			198.95	
JUNE	682.29	417.44			150.57		10.68	40.79		62.81	
JULY	1039.19	366.40		49.93	132.10		22.42		368.00	44.11	49.16
AUG	644.63	425.26			130.32	34.83	26.34			25.88	
SEPT	903.61	593.93			132.10		27.37		86.42	63.79	
OCT	950.50	396.98			127.84		13.44		27.12	383.12	
NOV	675.53	398.98			133.72		7.87	51.10	14.81	69.05	
DEC	1337.90	398.98			284.11	228.38	73.57		65.90	241.04	45.92
TOTAL	10267.93	5161.69	50.75	105.41	1650.55	525.75	290.29	110.87	740.95	1536.49	95.08

YEARLY OPERATING COSTS

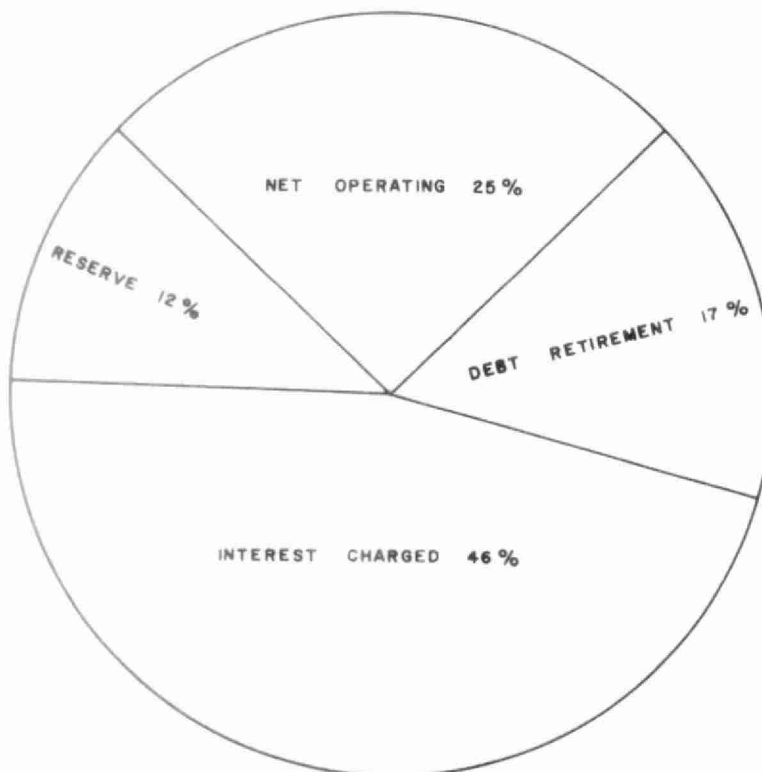
YEAR	M.G. TREATED	TOTAL COST	COST PER FAMILY PER YEAR	COST PER MILLION GALLONS	COST PER L.B. OF BOD REMOVED
1965	149,727	\$ 8109.72	\$ 5.26	\$ 54.16	3 CENTS
1966	169,979	\$ 10267.83	\$ 6.55	\$ 60.41	4 CENTS

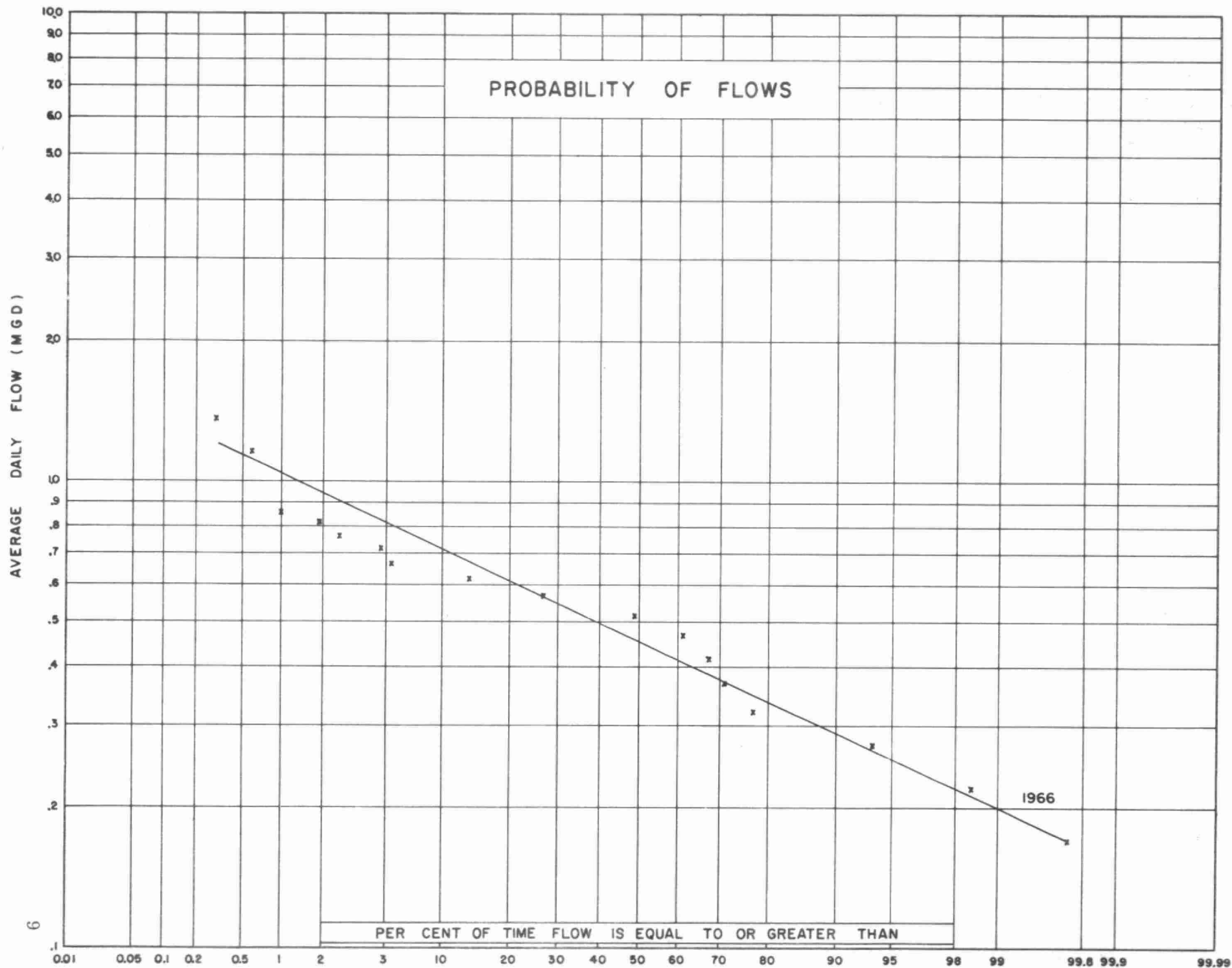
* BASED ON ANNUAL POPULATION ESTIMATE AND 3.9 PERSONS PER FAMILY

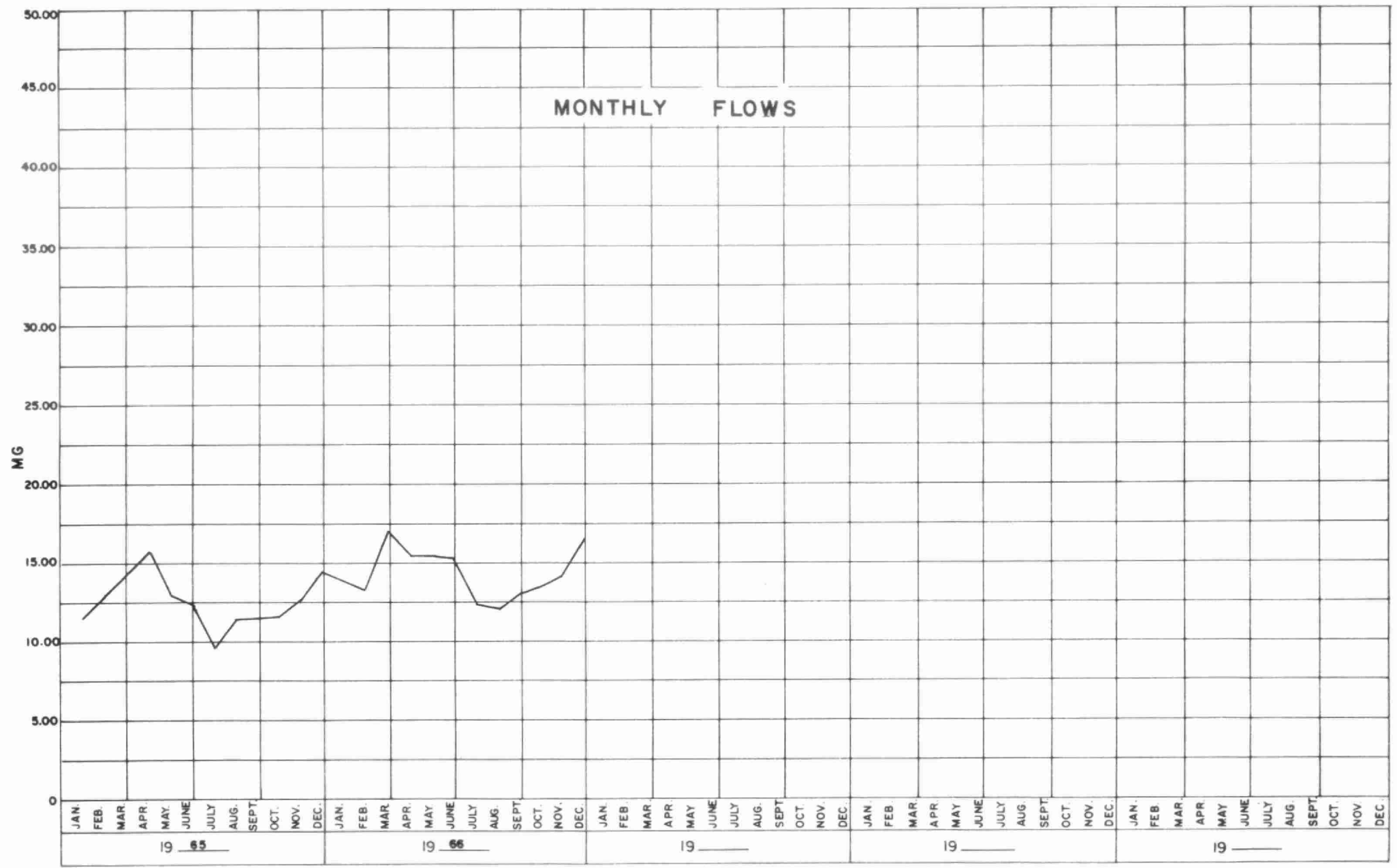
1966 OPERATING COSTS



TOTAL ANNUAL COST







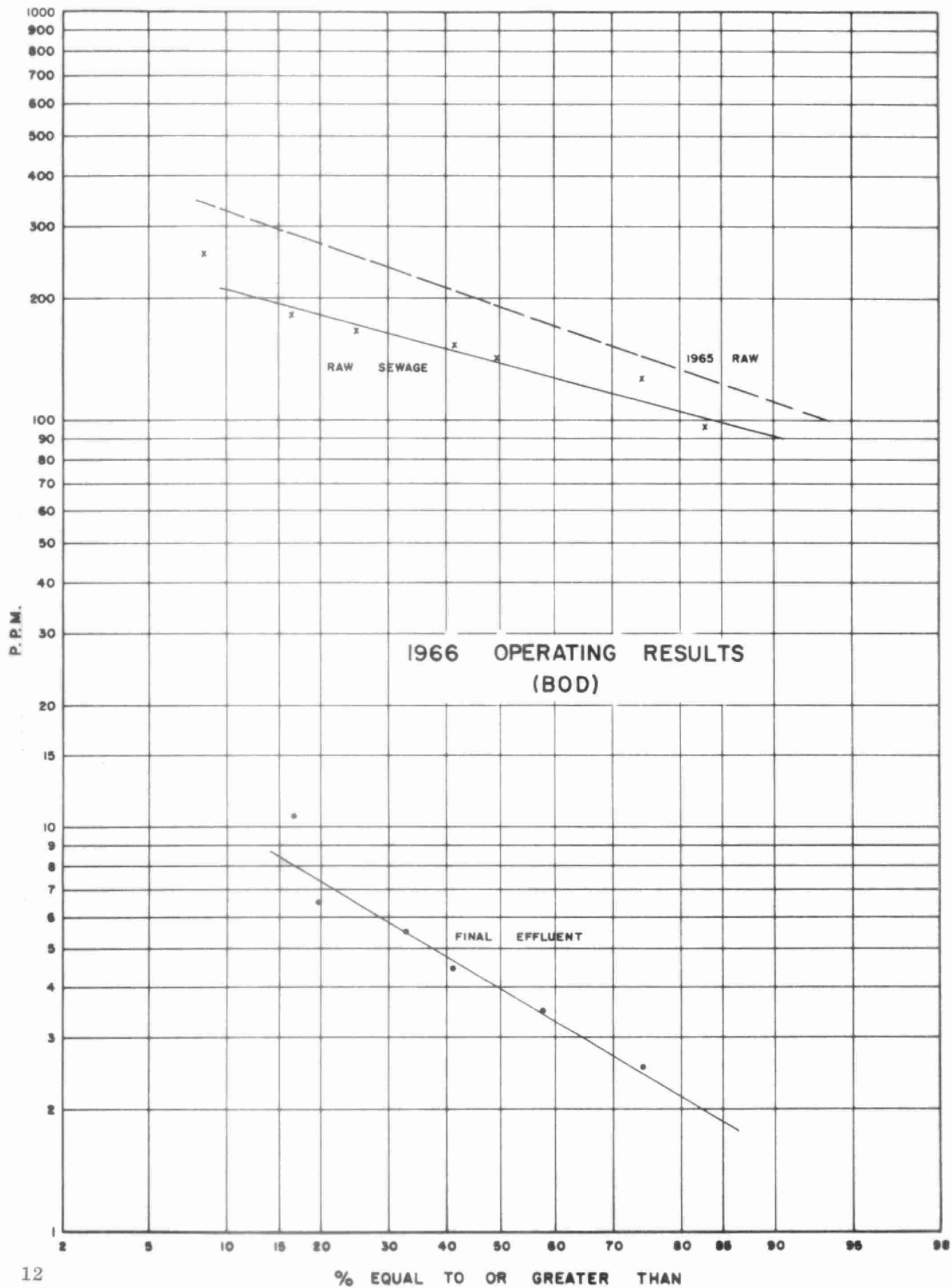
FLOW DATA

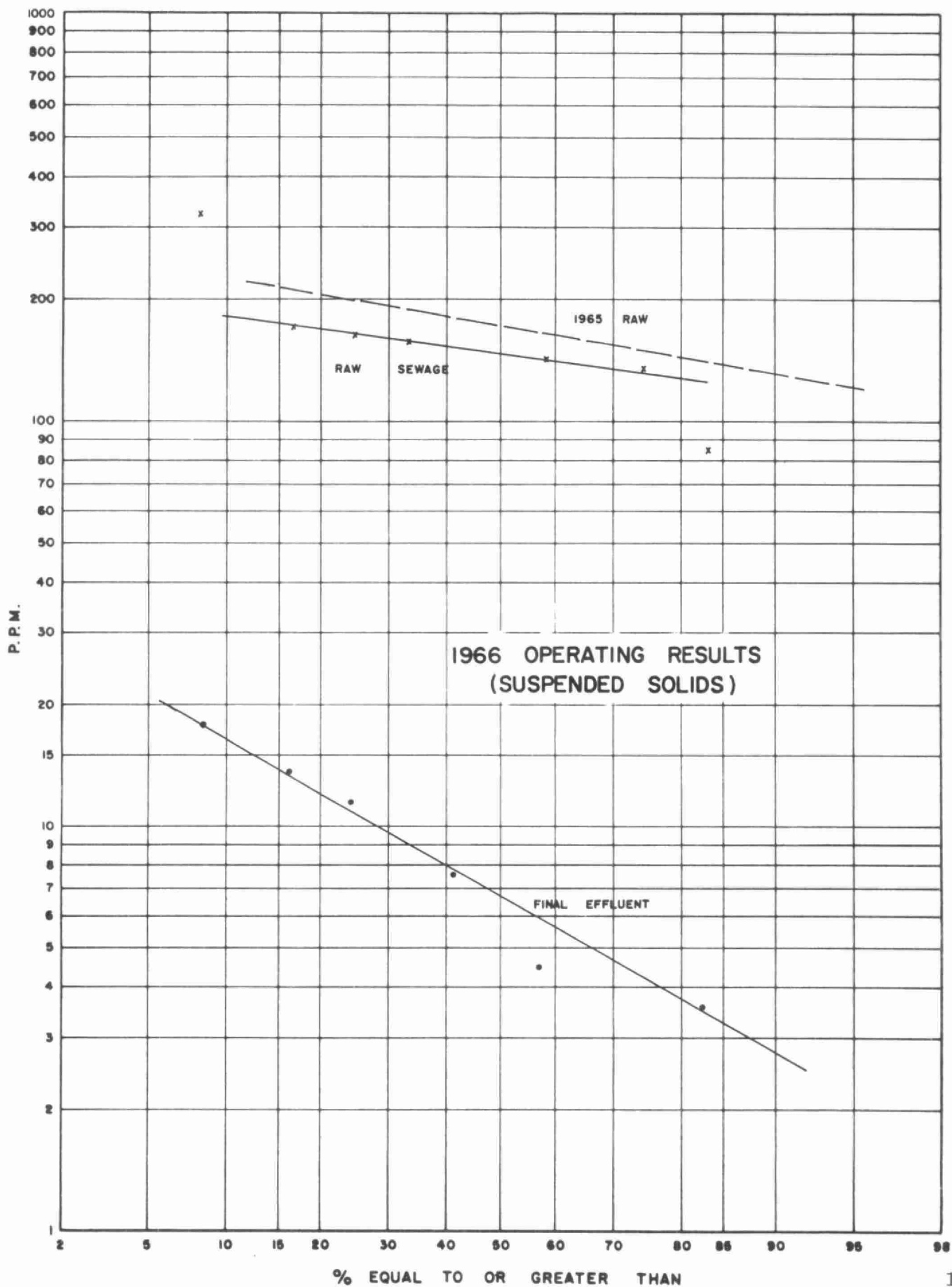
MONTH	Total Flow MG	Avg. Daily Flow MG	Max. Instan. Rate MG	Max. 24-Hr. Flow MG
January	13.584	.438	*	*
February	13.148	.470	*	*
March	16.794	.542	1.700	.702
April	15.316	.511	2.100	.692
May	15.424	.498	1.500	.702
June	15.177	.506	1.700	.702
July	12.146	.392	2.200	1.350
August	11.960	.385	1.900	.624
September	12.690	.423	1.500	.648
October	13.392	.446	1.650	.864
November	14.094	.469	1.700	.702
December	16.254	.524	1.800	.810
Total	169.979	-	-	-
Average	14.164	.466	-	-

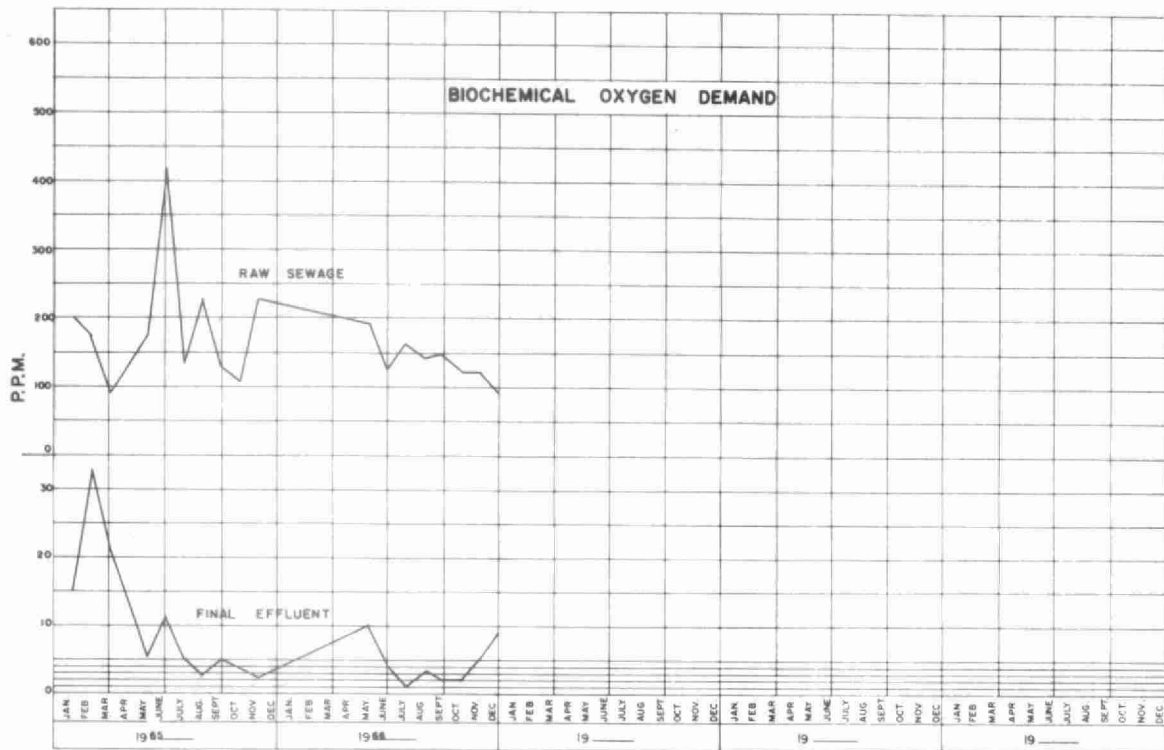
* Data not available.

COMMENTS

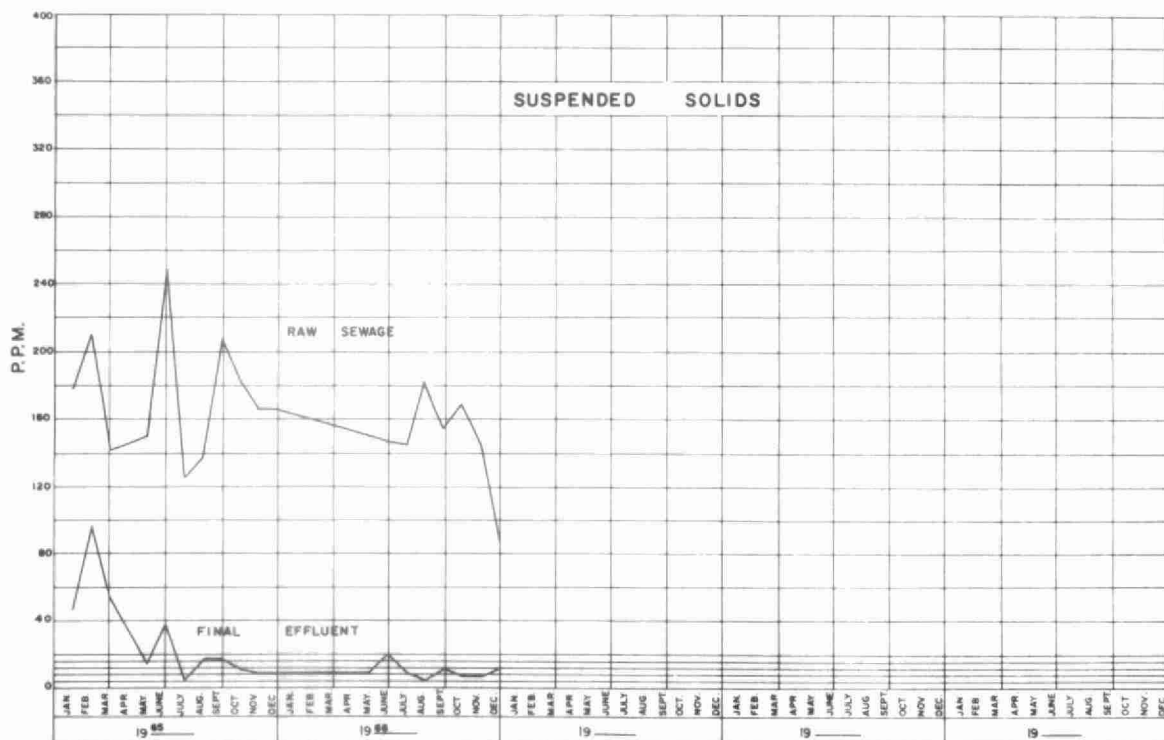
The average flow to the plant is 0.466 mgd which is 92% of the plant capacity. Forty percent of the time the flow is equal to or greater than the design flow.







MONTHLY VARIATIONS



GRIT, B.O.D AND S.S. REMOVAL

MONTH	B. O. D.				S. S.			
	INFLUENT PPM.	EFFLUENT PPM.	% REDUCTION	TONS REMOVED	INFLUENT PPM.	EFFLUENT PPM.	% REDUCTION	TONS REMOVED
JAN.	-	-	-	-	-	-	-	-
FEB.	-	-	-	-	-	-	-	-
MAR.	-	-	-	-	-	-	-	-
APR.	-	-	-	-	-	-	-	-
MAY	195	10	95.0	14.3	150	8	94.5	11.0
JUNE	125	4	97.0	9.2	146	18	87.5	9.7
JULY	165	1	99.5	10.0	144	8	94.5	8.2
AUG.	146	3	98.0	8.6	183	3	98.5	10.8
SEPT.	150	2	98.5	9.4	154	8	95.0	9.3
OCT.	125	2	98.5	8.2	168	5	97.0	10.9
NOV.	125	5	96.0	8.4	145	5	96.5	9.9
DEC.	92	9	90.0	6.7	85	9	89.5	6.2
TOTAL	-	-	-	115.6	-	-	-	118.1
AVG.	140	4	97.0	9.6	147	8	94.5	9.8

COMMENTS

On the basis of eight months' data, the BOD and SS of the final effluent averaged 4 and 9 ppm respectively which indicated a removal efficiency of 97.0% and 94.5% respectively.

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RECOMMENDATIONS

With the plant operating at 92% of design capacity, it is recommended that a report on plant expansion should be prepared by a consultant.

